IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1   1.   (Currently Amended) A formatting template for printing XML files,

2   comprising a data map ~~format~~ containing XML descriptors defining the formatting for

3   elemental content of the XML file, the XML descriptors being identified by qualified tags,

4   wherein the data map being configured for searching to match content associated with a

5   parsed XML tag with formatting instructions associated with a qualified tag corresponding to

6   the XML tag.

1   2.   (Currently Amended) The formatting template of claim 1 wherein the XML

2   descriptors are identified by a qualified tag generated by an XML document parser.

1   3.   (Previously Presented)   The formatting template of claim 2 wherein the

2   qualified tag comprises a concatenation of XML element start tags that must be traversed in

3   the XML file to get to a particular element.

1   4.   (Currently Amended) The formatting template of claim 2 wherein the

2   qualified tag identifies ~~a description~~ the formatting instruction that is used to format the

3   content for the element.

1   5.   (Original)   The formatting template of claim 4 wherein the qualified tag is

2   generated whenever a start tag is encountered.

1   6.   (Original)   The formatting template of claim 4 wherein the qualified tag is

2   modified whenever a start tag is encountered.

1   7.   (Original)   The formatting template of claim 1 wherein the XML file to be

2   printed is parsed into element contents that can be broken into fields and processed using a

3   chain of field XMDS.

1   8.   (Original)   The formatting template of claim 7 wherein the element

2   contents are broken into fields either with byte counts or with delimiters.

1   9.   (Original)   The formatting template of claim 1 wherein a chain of attribute

2   XMDS are used for formatting attributes, wherein the attributes are broken into fields, the

3   fields being formatted with a chain of field XMDS.

1   10.   (Currently Amended) A printing system, comprising:

2   a spooler for receiving printable information from the print channel;

3   a print services facility for parsing an XML file, ~~formatting the XML file according to~~

4   ~~a formatting template, the print services facility organizing a data stream representing the~~

5   ~~formatted XML file and generating a print steam having been formatted using the formatting~~

6   ~~template~~; and

7   a printer for printing the print steam according to the formatting defined by the

8   formatting template;

9   wherein the formatting template defines a data map ~~format~~ containing XML

10   descriptors defining the formatting for an element of the XML file, the XML descriptors

11   being identified by qualified tags, wherein the data map is configured for searching to match

12   content associated with parsed XML tag with formatting instructions associated with a

13   qualified tag corresponding to the XML tag, and wherein the print services facility organizes

14   a data stream representing the formatted XML file and generates a print steam having been

15   formatted using the formatting instructions.

1   11.   (Currently Amended) The printing system of claim 10 wherein the XML

2   descriptors are identified by a qualified tag generated by an XML document parser.

1   12.   (Previously Presented)   The printing system of claim 11 wherein the

2   qualified tag comprises a concatenation of XML element start tags that must be traversed in

3   the XML file to get to a particular element.

1   13.   (Currently Amended) The printing system of claim 11 wherein the qualified

2   tag identifies a description the formatting instruction that is used to format the content for the

3   element.

1   14.   (Original)   The printing system of claim 13 wherein the qualified tag is

2   generated whenever a start tag is encountered.

1   15.   (Original)   The printing system of claim 13 wherein the qualified tag is

2   modified whenever a start tag is encountered.

1   16.   (Original)   The printing system of claim 10 wherein the XML file to be

2   printed is parsed into element contents that can be broken into fields and processed using a

3   chain of field XMDS.

1   17.   (Original)   The printing system of claim 16 wherein the element contents

2   are broken into fields either with byte counts or with delimiters.

1   18.   (Original)   The printing system of claim 10 wherein a chain of attribute

2   XMDS are used for formatting attributes, wherein the attributes are broken into fields, the

3   fields being formatted with a chain of field XMDS.

1   19. (Currently Amended) A method for printing XML files directly using a

2 formatting template, comprising:

3   placing an XML file to be printed on a server spool;

4   parsing the XML file until a start tag is encountered;

5   generating a qualified tag in response to encountering the start tag;

6   providing a formatting template to a print services facility, wherein the formatting

7 template defines a data map ~~format~~ containing XML descriptors defining the formatting for

8 an element of the XML file, an XML descriptor being identified by the qualified tag

9   searching the data map to match content associated with the encountered start tag

10 with formatting instructions associated with the qualified tag corresponding to the start tag;

11 and

12   pulling the XML file from the spooler for generating a formatted print stream using

13 the formatting instructions ~~template~~.

1   20. (Currently Amended) The method of claim 19, further comprising:

2   ~~parsing the XML file to be printed into elemental content;~~

3 ~~searching the formatting template for formatting instructions for a parsed element content;~~

4   ~~determining whether the search was successful;~~

5   ~~formatting the element content using formatting instructions obtained by the search;~~

6 ~~and~~

7   determining whether the end of the document has been reached.

1   21.   (Original)   The method of claim 20, further comprising continuing to

2   process parsed element content when the end of the document is not reached.

1   22.   (Original)   The method of claim 21, further comprising sending the

2   formatted data stream to a printer.

1   23.   (Original)   The method of claim 19 wherein the formatting template

2   comprises a chain of attribute XMDS for formatting attributes, wherein the attributes are

3   broken into fields, the fields being formatted with a chain of field XMDS.

1   24.   (Currently Amended) An article of manufacture comprising a program

2   storage medium readable by a computer, the medium tangibly embodying one or more

3   programs of instructions executable by the computer to perform a method for printing XML

4   files directly using a formatting template, the method comprising:

5   placing an XML file to be printed on a server spool;

6   <u>parsing the XML file until a start tag is encountered;</u>

7   <u>generating a qualified tag in response to encountering the start tag;</u>

8   providing a formatting template to a print services facility, wherein the formatting

9   template defines a data map ~~format~~ containing XML descriptors defining the formatting for

10   an element of the XML file<u>, an XML descriptor being identified by the qualified tag</u>

11   <u>searching the data map to match content associated with the encountered start tag</u>

12   <u>with formatting instructions associated with the qualified tag corresponding to the start tag;</u>

13   and

14   pulling the XML file from the spooler for generating a formatted print stream using

15   the formatting <u>instructions</u> ~~template~~.

1   25.   (Currently Amended) The article of manufacture of claim 24, further

2   comprising:

3   ~~parsing the XML file to be printed into elemental content;~~

4   ~~searching the formatting template for formatting instructions for a parsed element content;~~

5   ~~determining whether the search was successful;~~

6   ~~formatting the element content using formatting instructions obtained by the search;~~

7   ~~and~~

8   determining whether the end of the document has been reached.

1   26.   (Original)   The article of manufacture of claim 25, further comprising

2   continuing to process parsed element content when the end of the document is not reached.

1   27.   (Original)   The article of manufacture of claim 26, further comprising

2   sending the formatted data stream to a printer.

1   28.   (Original)   The article of manufacture of claim 24 wherein the formatting

2   template comprises a chain of attribute XMDS for formatting attributes, wherein the

3   attributes are broken into fields, the fields being formatted with a chain of field XMDS.

1   29.   (Currently Amended) A printing system, comprising:

2   spooler means for receiving printable information from the print channel;

3   print driver means for parsing an XML file~~, formatting the XML file according to a~~

4   ~~formatting means, the print services facility organizing a data stream representing the~~

5   ~~formatted XML file and generating a print steam having been formatted using the formatting~~

6   ~~template~~; and

7   printing means for printing the print steam according to the formatting defined by the

8   formatting template;

9   wherein the formatting means defines a data map ~~format~~ containing XML descriptors

10   defining the formatting for an element of the XML file<u>, the XML descriptors being identified</u>

11   <u>by qualified tags, wherein the data map is configured for searching to match content</u>

12   <u>associated with parsed XML tag with formatting instructions associated with a qualified tag</u>

13   <u>corresponding to the XML tag, and wherein the print driver means organizes a data stream</u>

14   <u>representing the formatted XML file and generates a print steam having been formatted using</u>

15   <u>the formatting instructions</u>.